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NiceProt View of Swiss-Prot: O95948

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Entry name **ONC2_HUMAN**
 Primary accession number **O95948**
 Secondary accession numbers None
 Entered in Swiss-Prot in Release 40, October 2001
 Sequence was last modified in Release 40, October 2001
 Annotations were last modified in Release 41, February 2003

Basic information of the protein

Protein name **One cut domain family member 2**
 Synonyms **ONECUT-2 transcription factor**
OC-2
ONECUT2
 Gene name **HNF4A**
 From **Homo sapiens (Human) [TaxID: 9606]**
 Taxonomy **Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.**

Annotations

[1] SEQUENCE FROM NUCLEIC ACID.

MEDLINE=99115605; PubMed=9915796; [NCBI, ExPASy, EBI, Israel, Japan]

Jacquemir P., Fainoy V., Rousseau G.G., Lemaigre F.P.:

"OC-2, a novel mammalian member of the ONECUT class of homeodomain transcription factors whose function in liver partially overlaps with that of hepatocyte nuclear factor-6.;"

J. Biol. Chem. 274:2665-2671 (1999).

Properties

- **FUNCTION:** TRANSCRIPTIONAL ACTIVATOR. ACTIVATES THE TRANSCRIPTION OF A NUMBER OF LIVER GENES SUCH AS HNF3B.
- **SUBCELLULAR LOCATION:** Nuclear.
- **SIMILARITY:** Contains 1 CUT domain.
- **SIMILARITY:** BELONGS TO THE CUT/HOMEOPROTEIN DOMAIN-CONTAINING PROTEINS.

Comments

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Links

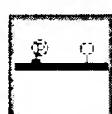
EMBL [Y18198; CAB38253.1; -](#) | EMBL | GenBank | DDBJ | CodingSequence |

TRANSEAC	10-2591-1.
Genew	HGNC;X139;ONCUT2.
CleanEx	HGNC;X139;ONCUT2.
MM	604894 [NCBI-EBI].
GeneCards	ONCUT2.
GeneLynx	ONCUT2; Homo sapiens.
GO	GO:0003702; Molecular function: RNA polymerase II transcription factor activity (<i>traceable author statement</i>).
GO	GO:0007397; Biological process: histogenesis and organogenesis (<i>traceable author statement</i>).
SOURCE	ONCUT2; Homo sapiens.
Ensembl	095948; Homo sapiens. [Entry / Contig view]
	IPR007108; Cut_homeo.
InterPro	IPR003350; Hmoeo_CUT.
	IPR001356; Homeobox.
	Graphical view of domain structure.
Pfam	PF02376; CUT; 1.
	PF00046; homeobox; 1.
ProDom	PD000010; Homeobox; 1.
	[Domain structure / List of seq. sharing at least 1 domain]
SMART	SM00389; HOX; 1.
PROSITE	PS00027; HOMEobox_1; FALSE_NEG.
	PS50071; HOMEobox_2; 1.
HOVERGEN	[Family / Alignment / Tree]
BLOCKS	095948.
ProtoNet	095948.
ProtoMap	095948.
PRESAGE	095948.
DIP	095948.
ModBase	095948.
SWISS-2DPAGE	Get region on 2D PAGE.

Associated

Transcription regulation; Homeobox; DNA-binding; Nuclear protein; Activator.

Annotations



Feature table viewer



Feature aligner

Key	From	To	Length	Description
10-2591-1	10-2591-1	10-2591-1	1	
10-2591-2	10-2591-2	10-2591-2	1	
10-2591-3	10-2591-3	10-2591-3	1	
10-2591-4	10-2591-4	10-2591-4	1	
10-2591-5	10-2591-5	10-2591-5	1	
10-2591-6	10-2591-6	10-2591-6	1	

Length: 485 Molecular weight: 52482 CRC64: AF21E052EFBE5DA1 [This is a checksum on the AA sequence]

Protein O95948 is composed of 485 amino acids, with a MW of 52482.

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O95948

O95948 in FASTA format

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or at NCBI (USA)



Sequence analysis tools: ProtParam, ProtScale,
Compute pI/Mw, PeptideMass, PeptideCutter,
Dotlet (Java)



ScanProsite, MotifScan



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Search <input type="text" value="Swiss-Prot/TrEMBL"/> <input type="button" value="▼"/> for <input type="text" value="OC-3"/>		<input type="button" value="Go"/>	<input type="button" value="Clear"/>	

NiceProt View of TrEMBL: Q8K557

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[\[Help\]](#) Information about the view

Entry name **Q8K557**

Primary accession number **Q8K557**

Secondary accession numbers None

Entered in TrEMBL in Release 22, October 2002

Sequence was last modified in Release 22, October 2002

Annotations were last modified in Release 24, June 2003

[Name and origin of the protein](#)

Protein name **OneCut 3**

Synonyms None

Gene name **ONECUT3**

From *Mus musculus* (Mouse) [TaxID: 10090]

Taxonomy Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; *Mus*.

[\[Cross-references\]](#)

[1] SEQUENCE FROM NUCLEIC ACID.

STRAIN=129 SvEvTaefBr;

MEDLINE=21942113; PubMed=11944891; [NCBI, ExPASy, EBI, Israel, Japan]

Vanhorenbeeck V, Jacquemin P, Lemaigne F.P., Rousseau G.G.:

"OC-3, a Novel Mammalian Member of the ONECUT Class of Transcription Factors.";

Biochem. Biophys. Res. Commun. 292:848-854(2002).

[\[Cross-references\]](#)

None

[\[Cross-references\]](#)

EMBL AY080897; AAL86921.1; -; [EMBL, GenBank, DDBJ] [CodingSequence]

MGD MGI:1891409; OneCut3.

GeneLynx ONECUT 3; *Mus musculus*.

GO:0005667; Cellular component: transcription factor complex (*inferred from direct assay*).

GO:0003700; Molecular function: transcription factor activity (*inferred from direct assay*).

GO:0006357; Biological process: regulation of transcription from Pol II promoter

(inferred from direct assay)

SOURCE	O-ECU-13; <i>Mus musculus</i> .
Ensembl	Q8K557; <i>Mus musculus</i> . [Entry / Contig view]
	IPR007108; Cut homeo.
InterPro	IPR003350; Homeo_CUT.
	IPR001356; Homeobox.
	Graphical view of domain structure.
Pfam	PF02376; CUT; 1.
	PF00046; homeobox; 1.
ProDom	PD000010; Homeobox; 1.
	[Domain structure - List of seq. sharing at least 1 domain]
SMART	SM00389; HOX; 1.
PROSITE	PS50071; HOMEobox_2; 1.
HOVERGEN	[Family / Alignment / Tree]
ProtoMap	Q8K557.
PRESAGE	Q8K557.
ModBase	Q8K557.
SWISS-2DPAGE	Get region on 2D PAGE.

Keywords

None

Properties

None

Structure information

Length: **490** Molecular weight: **49656** CRC64: **DBB3828589D6B03E** [This is a checksum on the AA sequence]

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Protein Q8K557 is a member of the TrEMBL database. It is a protein of unknown function.

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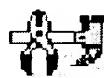
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Compute pI/Mw, PeptideMass, PeptideCutter,
Dotlet (Java)



ScanProsite, MotifScan



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1	2	onecut	USPAI; US-PGPUB; EPO; JPO; DERWENT	2003-06-16 08:17
2	100	oc-2	USPAI; US-PGPUB; EPO; JPO; DERWENT	2003-06-16 08:17
3	1055	oc-3	USPAI; US-PGPUB; EPO; JPO; DERWENT	2003-06-16 08:17
4	0	onecut and transcription	USPAI; US-PGPUB; EPO; JPO; DERWENT	2003-06-16 08:18
6	0	oc-3 and transcription	USPAI; US-PGPUB; EPO; JPO; DERWENT	2003-06-16 08:18
5	22	oc-2 and transcription	USPAI; US-PGPUB; EPO; JPO; DERWENT	2003-06-16 08:18

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FILE 'MEDLINE, BIOSIS, CAPLUS, EMBASE, CANCERLIT' ENTERED AT 08:21:56 ON
16 JUN 2003

L1 66 S ONECUT
L2 431 S OC 2
L3 278 S OC 3
L4 862610 S TPANSCRIPTION
L5 53 S L1 AND L4
L6 32 S L2 AND L4
L7 24 S L3 AND L4
L8 84 S L5-L7
L9 36 DUP REM L8 (48 DUPLICATES REMOVED)
L10 13 S L9 NOT PY>1999